

CLAIMS

1. Oral device for administration or sampling of a substance, comprising at least one oral insert (2) intended to be kept in a continuous manner in the mouth (10) of a user (1) and comprising transfer means (20) for delivering thereto or sampling therefrom at least one fluid (F), characterized in that, when the mouth is at rest, the oral insert occupies a sufficient volume in the oral cavity to exert a resistance to a determined extraction force (E) as long as the mouth is not voluntarily opened, and in that the device comprises at least one extra-gingival part intended to be inserted into a part of the oral cavity (10) situated inside one cheek (15) and outside one maxilla.
2. Device according to claim 1, characterized in that the oral insert (2) comprises at least one part (21) which can be deformed under the pressure of the walls of the oral cavity (14, 15).
3. Device according to one of the preceding claims, characterized in that the oral insert (2) comprises at least one part (231, 202) which can decrease in volume under the pressure of the walls of the oral cavity (14, 15).
4. Device according to one of the preceding claims, characterized in that at least one part of the oral insert (2) has a shape (23) approximately complementary to the shape of the palate (14).
5. Device according to one of the preceding claims, characterized in that the oral insert (2) comprises at least one part inserted inside the maxillae and which has on its front side a bulge (22) bearing on the internal surface of the teeth (11) or the gum (12) of at least one maxilla, thus exerting a resistance to an extraction force (E).
6. Device according to one of the preceding claims, characterized in that the extra-gingival part has, once in place, a shape approximately

complementary to an external surface of at least one tooth (16) or at least one gum (17) with which it is in contact and bearing on this surface so as to exert a resistance to an extraction force (E).

5        7. Device according to one of the preceding claims, characterized in that the oral insert (2) comprises at least one part having, once it is in place, a surface (230, 205, 206) with a shape approximately complementary to a surface of the oral cavity (10) with which it is in contact and cooperating with this surface (14, 15) so as to exert by a  
10        suction effect a resistance to an extraction force (E).

8. Device according to one of the preceding claims, characterized in that the oral insert (2) comprises several orifices (20) between which there is distributed a flow of fluid (F) transferred between the oral cavity (10) 15        and the inside of the oral insert (29, 32).

9. Device according to one of the preceding claims, characterized in that at least one part of the oral insert (2) is constituted by a porous material through which the flow of delivered or sampled fluid (F) flows in a  
20        distributed manner.

10. Device according to one of the preceding claims, characterized in that the oral insert (2) comprises a storage chamber (32) communicating with the oral cavity (10) in order to deliver thereto or  
25        sample therefrom at least one fluid (F).

11. Device according to one of the preceding claims, characterized in that the oral insert (2) enables the oral cavity (10) to communicate with at least one conduit (3) outside the user (1) and conveying at least one  
30        fluid (F) administered or sampled in this oral cavity.

12. Device according to one of the preceding claims, characterized in that it delivers a product (F) in solid form or with high viscosity and interacting with a second fluid (F1) inside the oral insert (2), the product

(F) having after this interaction a sufficiently reduced viscosity to allow or to increase its flow rate passing through at least one orifice (20) communicating with the oral cavity (10).